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| EXAMINER |
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RYMAN, DANIEL J

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2616

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 03/07/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/978,429

Applicant(s)

MEZEUL ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12, 13, 23, 25, 28-30 and 32-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12, 13, 23, 25, 28-30 and 32-40 is/are rejected.
- 7) ☒ Claim(s) 1, 2, 4, 6-9, 13, 23, 25, 28-30 and 32-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Examiner acknowledges Applicant's filing of an RCE on 24 January 2007.
2. Applicant's arguments with respect to claims 1-9, 12, 13, 23, 25, 28-30, and 32-37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 1 is objected to because of the following informalities: in line 6, "pushing an internal" should be "pushing, at the interface, an internal" to clarify which device performs the pushing step and, in line 7, "a plurality of circuit cards" should be "the plurality of circuit cards". Appropriate correction is required.
4. Claim 2 is objected to because of the following informalities: in line 2, "packet to at" should be "packet by at". Appropriate correction is required.
5. Claim 4 is objected to because of the following informalities: in line 4, "the routing label" should be "the internal routing label". Appropriate correction is required.
6. Claim 6 is objected to because of the following informalities: in line 3, "receiving the packet" should be "receiving, from the interface, the packet" to clarify the relationship between the interface and the switch. Appropriate correction is required.
7. Claim 7 is objected to because of the following informalities: in line 3, "receiving the packet" should be "receiving, from the interface, the packet" to clarify the relationship between the interface and the switch. Appropriate correction is required.

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8. Claim 8 is objected to because of the following informalities: in line 3, “receiving the packet” should be “receiving, from the interface, the packet” to clarify the relationship between the interface and the switch. Appropriate correction is required.
9. Claim 9 is objected to because of the following informalities: in line 4, “receiving the packet” should be “receiving, from the interface, the packet” to clarify the relationship between the interface and the switch. Appropriate correction is required.
10. Claim 13 is objected to because of the following informalities: in line 2, “the routing label” should be “the internal routing label”; in line 2, “label information table stack” should be “label stack” since “the label information table stack” lacks antecedent basis; and in line 3, “the system” should be “the node” since “the system” lacks antecedent basis. Appropriate correction is required.
11. Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 has been amended to include the limitations contained in claim 23, such that claim 23 no longer further limits the subject matter of claim 1. If Applicant chooses to cancel 23, then Applicant should modify the dependency of claim 25, which depends upon claim 23.
12. Claim 25 is objected to because of the following informalities: in line 2, “the routing label” should be “the internal routing label” and, in lines 2-3, “at the processor” should be “at a processor”. Appropriate correction is required.

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13. Claim 28 is objected to because of the following informalities: in line 3, “receiving the packet” should be “receiving, from the interface, the packet” to clarify the relationship between the interface and the switch and, in line 6, “the routing label” should be “the internal routing label”. Appropriate correction is required.

14. Claim 29 is objected to because of the following informalities: in line 3, “receiving the packet” should be “receiving, from the interface, the packet” to clarify the relationship between the interface and the switch; in line 6, “the routing label” should be “the internal routing label”; and, in line 6, “label for transporting the packet” should be “label” since “the routing label for transporting the packet” lacks antecedent basis. Appropriate correction is required.

15. Claim 30 is objected to because of the following informalities: in line 1, “claim 23” should be “claim 32” since “the reply packet” lacks antecedent basis in claim 23 and, in line 3, “receiving the packet” should be “receiving, from the interface, the packet” to clarify the relationship between the interface and the switch. Appropriate correction is required.

16. Claim 32 is objected to because of the following informalities: in line 2, “the system” should be “the node” since “the system” lacks antecedent basis. Appropriate correction is required.

17. Claim 33 is objected to because of the following informalities: in line 1 “Apparatus” should be “An apparatus” and, in line 8, “an internal” should be “the internal”. Appropriate correction is required.

18. Claim 34 is objected to because of the following informalities: in lines 3-4, “packet in response to receiving a control packet to one” should be “packet, in response to receiving a

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modified packet that is a control packet, to one” to clarify that the control packet is a modified packet. Appropriate correction is required.

Claim Rejections - 35 USC § 112

19. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20. Claims 1-9, 12, 13, 23, 25, 28-30, and 32-40 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

21. Claim 1 recites the limitation "the packet" in line 9. There is insufficient antecedent basis for this limitation in the claim. Claim 1 previously recites "a packet" in line 3 and "pushing an internal routing label to the label stack of the packet" in line 6. It is unclear whether "the packet" in line 9 refers to "a packet" in line 3 or the modified packet in line 6. Examiner assumes that "the packet" in line 9 refers to the modified packet in line 6. Therefore, Examiner suggests changing, in line 6, "stack of the packet" to "stack of the packet to create a modified packet" and, in line 9, "the packet" to "the modified packet." If this suggestion is accepted by Applicant, then Applicant should also change "the packet" to "the modified packet" in claim 2, line 2 (both instances); claim 3, line 2 (both instances); claim 6, lines 2, 3, and 4; claim 7, lines 2, 3, and 4; claim 8, lines 2, 3, and 4; claim 9, lines 2, 4, and 5; claim 12, line 2; claim 13, line 3; claim 25, line 2; claim 28, lines 2, 3, and 4; claim 29, lines 2, 3, and 4; claim 30, lines 2, 3, and 4; and claim 32, line 2.

22. Claim 33 recites the limitation "the packet" in lines 7, 8, and 9. There is insufficient antecedent basis for this limitation in the claim. Claim 32 previously recites "a packet" in line 3

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and “pushing an internal routing label to the label stack of the packet” in line 6. It is unclear whether “the packet” in lines 7, 8, and 9 refers to “a packet” in line 3 or the modified packet in line 6. Examiner assumes that “the packet” in lines 7, 8, and 9 refers to the modified packet in line 6. Therefore, Examiner suggests changing, in line 6, “stack of the packet” to “stack of the packet to create a modified packet” and, in lines 7, 8, and 9, “the packet” to “the modified packet.”

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 1, 13, 23, 25, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota (USPN 6,987,762) in view of van Landegem (USPN 5,265,091), of record.

25. Regarding claims 1 and 23, Shiota discloses a method of routing IP packets between a plurality of circuit cards within a node of a network (where the MPLS packet is an IP packet “encapsulated by the data called a shim header,” col. 1, lines 26-28, and where the packets are routed between a plurality of circuit cards within a node, Fig. 1 and col. 8, lines 39-59), comprising: receiving a packet at an interface, the packet being an IP packet and including a label stack, the label stack including an external routing label for use in forwarding between nodes along a label switched path (col. 8, lines 39-59, where an MPLS packet is received and its label stack is processed); pushing an internal routing label to the label stack of the packet, the

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internal routing label specifying one of a plurality of circuit cards (where a controller writes an “updated internal held header” to a packet, col. 15, lines 26-33, where the internal held header includes output channel information, col. 13, lines 38-48, and where the switch uses the output channel information to route the packet to the correct line card, col. 8, lines 43-55); routing the packet to the one of the plurality of circuit cards specified in the internal routing label (where a controller writes an “updated internal held header” to a packet, col. 15, lines 26-33, where the internal held header includes output channel information, col. 13, lines 38-48, and where the switch uses the output channel information to route the packet to the correct line card, col. 8, lines 43-55).

Shiota does not expressly disclose that the routing label includes a packet type where the routing of the packet to the one of the plurality of circuit cards specified in the label occurs in response to the packet type being indicative of a first type. Van Landegem discloses, in a system that utilizes an internal routing tag, having a control cell that includes a Type field (col. 8, lines 25-34). Van Landegem also discloses that the control cell is switched differently than normal cells in that the control cell is sent to a processor on the node (col. 9, lines 12-17), rather than a circuit card. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use van Landegem’s control cell in the context of Shiota’s switching node to permit the node to receive and process control packets. To do this, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the routing label include a packet type to allow the system to distinguish between “normal” packets and control packets thereby enabling the system to route normal packets to one of the plurality of circuit cards specified in the label and to route the control packet to a controller in the switching node.

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26. Regarding claim 13, Shiota in view of van Landegem discloses popping the routing label from the label information table stack after receiving the packet at the processor within the system (van Landegem: col. 9, lines 18-22, where the processor determines the output link of the cell and where cell are routed according to routing tags such that the processor “pops” the label from an information table stack).

27. Regarding claim 25, Shiota in view of van Landegem discloses popping the routing label from the label stack after receiving the packet at the processor within the node system (van Landegem: col. 9, lines 45-61, where the processor modifies the routing label such that is “pops” the label before it modifies it).

28. Regarding claim 28, Shiota in view of van Landegem discloses receiving the packet at a switch (Shiota: Fig. 1 and col. 8, lines 51-55, where the switch receives packets from the line cards); and switching the packet to a predetermined port of the switch coupled to the one of the plurality of circuit cards specified in the routing label (Shiota: Fig. 1 and col. 8, lines 51-55, where the switch switches the packets to a respective line car based on the output channel information, i.e. “routing label”).

29. Regarding claim 32, Shiota in view of van Landegem discloses routing the packet to a processor within the system in response to the packet type being indicative of a control packet (van Landegem: col. 9, lines 12-17, where the system routes a control packet to a processor) and sending a reply packet to the one of the plurality of circuit cards specified in the internal routing label (van Landegem: col. 10, lines 6-12 where a confirm control cell is sent to the sender to acknowledge the setup of the connection and Shiota: col. 2, lines 1-16, where the apparatus uses label switched paths, such that the combination of Shiota and van Landegem

suggests using control packets in the apparatus to set up label switched paths through the apparatus).

30. Claims 2-9, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota (USPN 6,987,762) in view of van Landegem (USPN 5,265,091), of record, as applied to claims 1 and 23 above, and further in view of Timbs (USPN 5,809,025).

31. Regarding claims 2, 3, 6, 7, and 29, Shiota in view of van Landegem discloses that routing the packet to the one of a plurality of circuit cards comprises: receiving the packet at a switch (Shiota: col. 8, lines 39-59, where an MPLS packet is received and its label stack is processed); and switching the packet to the one of the plurality of circuit cards coupled to a predetermined port of the switch (Shiota: col. 8, lines 43-55, where the switch uses the output channel information to route the packet to the correct line card).

Shiota in view of van Landegem does not expressly disclose that the port is specified by a shelf identifier, a slot identifier, a link identifier, and a channel identifier included in the internal routing label. Timbs teaches, in a system for switching information between cards, routing a cell upon an inter-shelf route by using a shelf identifier (BTSI shelf number) and a slot identifier (slot identification number) (col. 10, lines 13-18). Timbs further discloses that, once a cell is received upon a particular destination shelf, the cell is routed according to a link identifier (span line number) and a channel identifier (channel number) (col. 10, lines 24-36). Timbs teaches that routing according to a shelf identifier, a slot identifier, a link identifier, and a channel identifier is beneficial because this permits "near-static routing of a data stream" "with minimal requirements of shared resources" (col. 2, line 66-col. 3, line 3). Simply, in such a system, within the switch, each intermediate module will be able to switch a cell based on

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static information contained in the module (col. 3, lines 7-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to switch packets according to a shelf identifier, a slot identifier, a link identifier, and a channel identifier included in the internal routing label in the system of Shiota since such routing permits "near-static routing of a data stream" where this eases the burden on the switch to update the switching tables.

32. Regarding claims 4, 5, 8, 9, and 30, Shiota in view of van Landegem discloses that routing the packet to a processor and sending the reply packet comprises: receiving the packet at a switch (Shiota: col. 8, lines 39-59, where an MPLS packet is received and its label stack is processed); switching the packet to a predetermined port of the switch coupled to the processor (Shiota: col. 8, lines 43-55, where the switch uses the output channel information to route the packet to the correct line card); and switching the reply packet to the one of the plurality of circuit cards coupled to a second predetermined port of the switch (van Landegem: col. 10, lines 6-14, where the confirm control cell is routed according to a routing label).

Shiota in view of van Landegem does not expressly disclose that the port is specified by a shelf identifier, a slot identifier, a link identifier, and a channel identifier included in the internal routing label. Timbs teaches, in a system for switching cells between cards, routing a cell upon an inter-shelf route by using a shelf identifier (BTSS shelf number) and a slot identifier (slot identification number) (col. 10, lines 13-18). Timbs further discloses that, once a cell is received upon a particular destination shelf, the cell is routed according to a link identifier (span line number) and a channel identifier (channel number) (col. 10, lines 24-36). Timbs teaches that routing according to a shelf identifier, a slot identifier, a link identifier, and

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a channel identifier is beneficial because this permits “near-static routing of a data stream” “with minimal requirements of shared resources” (col. 2, line 66-col. 3, line 3). Simply, in such a system, within the switch, each intermediate module will be able to switch a cell based on static information contained in the module (col. 3, lines 7-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to switch packets according to a shelf identifier, a slot identifier, a link identifier, and a channel identifier included in the internal routing label in the system of Shiota since such routing permits “near-static routing of a data stream” where this eases the burden on the switch to update the switching tables.

33. Claims 12, 33, 38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota (USPN 6,987,762) in view of Shimojo et al. (USPN 5,787,072), of record.

34. Regarding claims 12 and 33, Shiota discloses an apparatus at a node of a network, comprising: a plurality of circuit cards and a switching fabric (Fig. 1 and col. 8, lines 39-41); means for receiving a packet, the packet being an IP packet and including a label stack, the label stack including an external routing label for use in forwarding between nodes along a label-switched path (col. 8, lines 39-59, where an MPLS packet is received and its label stack is processed, and col. 1, lines 26-28, where the MPLS packet is an IP packet “encapsulated by the data called a shim header”); means for pushing an internal routing label to the label stack of the packet (where a controller writes an “updated internal held header” to a packet, col. 15, lines 26-33, where the internal held header includes output channel information, col. 13, lines 38-48, and where the switch uses the output channel information to route the packet to the correct line card, col. 8, lines 43-55), means for routing a packet through the switching fabric to one of the

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plurality of circuit cards based on an internal routing label attached to the packet (where a controller writes an "updated internal held header" to a packet, col. 15, lines 26-33, where the internal held header includes output channel information, col. 13, lines 38-48, and where the switch uses the output channel information to route the packet to the correct line card, col. 8, lines 43-55).

Shiota does not expressly disclose means for removing the internal routing label prior to transmission of the packet from the apparatus. Shimojo teaches, in a system utilizing an internal routing label, removing the internal routing label prior to the transmission of the packet from the apparatus (col. 1, lines 36-42, where the internal routing label is removed, i.e. "popped," before the cell is output). It is implicit that this is done to increase bandwidth efficiency in the network by removing information from the packet that will not be used by subsequent nodes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to remove the internal routing label prior to transmission of the packet from the apparatus to increase bandwidth efficiency in the network.

35. Regarding claim 38, Shiota in view of Shimojo discloses that the internal routing label includes at least one field for identifying the location of one of the plurality of the circuit cards within the node (Shiota: col. 8, lines 51-55, where the switch switches the packets to a line card based on the output channel information, i.e. the input routing label, such that the output channel information must identify the location of one of the plurality of circuit cards within the node).

36. Regarding claim 40, Shiota in view of Shimojo discloses a memory for storing a routing table, the routing table including fields for the external label and the internal routing label

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(Shiota: col. 9, lines 13-16, where the storing memory 15 stores the output channel information, i.e. the internal routing label, and a shim header group, i.e. an external label).

37. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota (USPN 6,987,762) in view of Shimojo et al. (USPN 5,787,072), of record, as applied to claim 33 above, and further in view of van Landegem (USPN 5,265,091), of record.

38. Regarding claim 34, Shiota in view of Shimojo does not expressly disclose a processor, the processor including means for sending a reply packet in response to receiving a control packet to one of the plurality of circuit cards identified in the internal routing label. However, Shiota in view of Shimojo does disclose setting up label switched paths through the apparatus (Shiota: col. 2, lines 1-16). Van Landegem teaches, in a system utilizing internal routing labels, using a processor (Fig. 4, ref. PR113), the processor including means for sending a reply packet in response to receiving a control packet to one of the plurality of circuit cards identified in the internal routing label (col. 9, lines 45-52, where the processor sets a VP and a new routing field for a control cell, and col. 10, lines 6-14, where a confirm control cell containing the VP and routing field are returned to the sender to acknowledge the setup of the connection). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a processor, the processor including means for sending a reply packet in response to receiving a control packet to one of the plurality of circuit cards identified in the internal routing label in order to set up label switched paths through the apparatus.

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39. Regarding claim 35, Shiota in view of Shimojo in further view of van Landegem discloses that the internal routing label further includes a packet type identifier (van Landegem: col. 8, lines 28-34).

40. Regarding claim 36, Shiota in view of Shimojo in further view of van Landegem discloses that the means for routing also routes based, at least in part, on the packet type identifier (van Landegem: col. 9, lines 12-17, where the node switches control packets to a processor and Shimojo: col. 1, lines 36-42, where the node switches normal packets to a destination circuit card).

41. Regarding claim 37, Shiota in view of Shimojo in further view of van Landegem discloses that the means for routing includes means for routing the packet to the processor if the packet type identifier indicates a control packet type (van Landegem: col. 9, lines 12-17, where the node switches control packets to a processor and Shimojo: col. 1, lines 36-42, where the node switches normal packets to a destination circuit card).

42. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota (USPN 6,987,762) in view of Shimojo et al. (USPN 5,787,072), of record, as applied to claim 38 above, and further in view of Timbs (USPN 5,809,025).

43. Regarding claim 39, Shiota in view of Shimojo does not expressly disclose that the field for identifying the location of one of the plurality of circuit cards within the node includes identifiers for a shelf and a slot of the one of the plurality of circuit cards. Timbs teaches, in a system for switching cells between cards, routing a cell upon an inter-shelf route by using a shelf identifier (BTSI shelf number) and a slot identifier (slot identification number) (col. 10, lines 13-18). Timbs teaches that routing according to a shelf identifier and a slot identifier is

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beneficial because this permits “near-static routing of a data stream” “with minimal requirements of shared resources” (col. 2, line 66-col. 3, line 3). Simply, in such a system, within the switch, each intermediate module will be able to switch a cell based on static information contained in the module (col. 3, lines 7-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to switch packets according to a shelf identifier and a slot identifier included in the internal routing label in the system of Shiota since such routing permits “near-static routing of a data stream” where this eases the burden on the switch to update the switching tables.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel J. Ryman
Examiner
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A handwritten signature in black ink, appearing to read "Daniel Ryman", is positioned below the printed name and title.